

## ULOMA EXTRAORDINARIA, A NEW SPECIES FROM CUBA (TENEBRIONIDAE)

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The species described below as new to science is so distinctive that it should be of special interest to all students of the ulomine Tenebrionidae. It is so different from the other species of *Uloma* that its segregation may eventually be necessary, but it should remain in *Uloma* until we have more information on generic relationships in the tribe. The new species was collected by my friend and colleague Fernando de Zayas, the zealous collector of Cuban insects. The specimens are deposited in the United States National Museum and in the personal collection of de Zayas; this is indicated in distributional data given below by "USNM" and "de Zayas" in parentheses.

### *Uloma extraordinaria*, NEW SPECIES

**HOLOTYPE**, male. Reddish brown; very shiny. *Head* short; epistoma with anterior border straight, laterally with distinct angle then weakly convex to eyes, epistomal sulcus semicircular and meeting anterior border at angle mentioned above; clypeal area moderately convex, between eyes strongly convex, these areas without setae; with deep, transverse, dorsal depression posteriorly. Eye with posterior border straight, emarginate anteriorly, dorsal lobe narrower and shorter than ventral lobe.

*Mouthparts*. Labrum without transverse carina, with large and small punctures of moderate density. Maxillary palpus with fourth segment only moderately expanded apically. Mentum slightly wider than long, lateral borders strongly arcuate, anterior border acutely emarginate medially, surface strongly concave and with a few coarse punctures and also with a broad band of very dense setae just inside the borders; labial palpi with third segment subcylindrical, not specialized. *Antenna* relatively short and relatively narrow, gradually expanded to 6th segment, 6th to 10th subequal in width and with borders rounded, 11th narrower and symmetrically rounded apically; sensory pores or pits not distinct.

*Thorax*. Pronotum in dorsal view wider than long though not apparently so; anterior border weakly concave and weakly margined, lateral borders with moderate margin and strongly and uniformly convex; posterior border weakly margined and moderately bisinuate with a weak emargination at middle; surface transversely and longitudinally strongly convex, evenly convex except for a small depression medio-posteriorly, densely covered with very fine punctures; pronotal hypomerone with sparser fine punctures. Prosternum sparsely punctate laterally; prosternal process narrow anteriorly, strongly arched posteriorly, with sharp hook at apex. Mesopleura sparsely, coarsely punctate. Mesosternum impunctate medially, medial notch declivous. Metepisternum sparsely, coarsely punctate. Metasternum with medial umbo just anterior to half length; densely, coarsely punctate laterally, remainder densely, very finely punctate.

*Legs*. Procoxa with a distinct umbo. Profemur very stout, flat ventral surface sharply delimited anteriorly but not posteriorly and with short, sparse, erect setae on basal half, glabrous on distal half. Protibia (fig. 1) with very strong dorsal excavation on distal half, thereby forming a strong projection at half length; posterior surface with very strong, broad, truncated, subapical projection; without an immovable spine at extreme apex, the apex formed by spurs: short, erect, moderately dense

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setae on most of ventral surface, then with very dense large setae ventrally near apex. Mesofemur slightly longer than usual, stout, strongly arcuate, ventrally flat and with short, erect setae on basal two-thirds. Mesotibia very weakly arcuate, gradually expanded apically, with very coarse punctures on anterior surface, with small distinct teeth on dorsal margin, with rough carina on posterior surface, with sparse, short, erect setae ventrally. Metafemur stout, strongly arcuate, ventrally flat and with short, erect setae on basal two-thirds. Metatibia straight, gradually expanded apically with a small though distinct ventral tooth on basal third, with a few very coarse punctures on anterior surface. Tarsi relatively short, with dense golden setae ventrally.

*Elytra* subparallel-sided, slightly wider at posterior third of length; strongly convex transversely; striae composed of coarse punctures connected by fine longitudinal sulcus, the striae therefore impressed; intervals weakly convex, with very minute punctures; elytral epipleurae continuous and distinct to elytral apex, though narrowing in area of ultimate visible sternite.

*Abdomen* with intercoxal process comparatively broad, rounded anteriorly; ultimate visible sternite with very weak sinuities on posterior margin; lateral borders of visible sternites strongly margined, except ultimate visible sternite which has lateral margin only at basal angles. Genitalia not examined.

ALLOTYPE, female. Dark reddish brown. Head less strongly convex between eyes. Pronotum obviously wider than long; lateral border strongly convex on anterior half, almost straight on posterior half; surface less strongly convex. Labium having mentum with concave surface densely and coarsely punctate and without band of setae on border. Metasternum without umbo.

Procoxa without umbo. Femora typical for the genus, not exceedingly stout, not arcuate, without setae ventrally. Protibia (fig. 2) gradually expanded and toothed dorsally on basal half, then with strong dorsal emargination on distal half; posterior surface with a few spines of medium size; apical spurs smaller; ventral surface with small subapical patch on dense setae. Mesotibia slenderer, without posterior carina, with very few setae ventrally. Metatibia without ventral tooth on basal third, without carina on posterior surface, with very few setae ventrally.

VARIATION. *Paratype, male*. Black with a reddish tint, the tint being stronger ventrally and on appendages. Larger than holotype, dorsal convexity slightly stronger, therefore appearing slightly more robust. Pronotum with anterior border slightly more concave; anterior angles therefore more acute. Genitalia with paramere broad, expanded apically into a flat lobe (fig. 3). *Paratype, female*. Slightly smaller than allotype. Elytra with intervals slightly more convex.

MEASUREMENTS. The following order is maintained in each measurement: first, holotype male; second, paratype male; third, allotype female; and fourth, paratype female. The question mark indicates that such a measurement could not be made because the specimen had been distorted through damage. Millimeters are the units of measure. Head, maximum width including eyes: 2.1, 2.3, 1.9, 1.8. Pronotum, maximum width: 4.3, 4.8, 3.5, 3.3. Pronotum, width at anterior angles: 2.6, 2.9, 2.4, 2.2. Pronotum, width at posterior angles: 3.8, 4.1, 3.4, ?. Pronotum, medial length: 3.5, 4.0, 2.8, 2.6. Elytra, maximum width: 4.9, 5.5, 4.2, ?. Elytra, medial length: 8.1, 9.0, 7.0, 6.9. Approximate total length: 12.9, 15.1, 11.2, 11.2.

DISTRIBUTION RECORDS. *Cuba. Oriente Province*: Pico Palma Mocha-Pico Joaquín, Sierra Maestra, Elev. 3900-5300 feet, May 18, 1948, F. de Zayas (Holotype, male, USNM No. 65593); Gran Piedra, Caney, June 1954, de Zayas and Alayo (Allotype, female, USNM); Piloto, Moa, VI-7-51, de Zayas (Paratype, male, de Zayas); Calas, Pico Turquino, V-48, de Zayas (Paratype, female, de Zayas). All localities are relatively



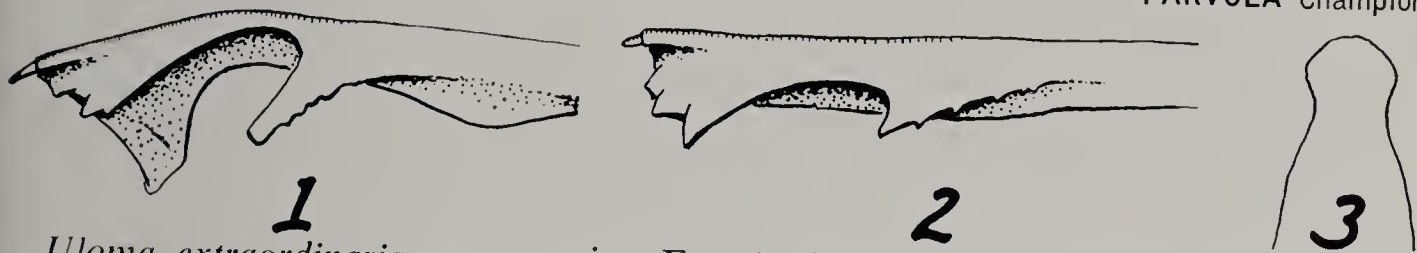
inaccessible areas in the higher altitudes of the Province and are seldom visited by entomologists.

Seven characteristics stand out as the most distinctive for this species. First, the odd shape of the male protibia is not even approached in any other species of the genus, hence the specific name. Strong serrations along the dorsal margin of the apical expansion of the protibia and numerous teeth on the posterior surface are found in other species. Second, the emargination along the dorsal border of the protibia of the female is likewise unique; strong serrations usually form that border. Third, the immovable spine at the extreme apex of the protibia in both male and female is uncommon; such a spine is usually found only in males. Fourth, the ventral tooth near the base of the metatibia of the male is rare; it is also present in the male of *U. grenadensis*. Fifth, the absence of an anterior depression on the pronotum in both male and female is characteristic of many species of the genus; it is mentioned here only because it is often used in determination keys. Sixth, the metasternal umbo of the male is apparently unique to this species. Seventh, and last, the complete elytral epipleuron is important; it is likewise complete in *U. retusa*, *mexicana*, *sulcata*, and *parvula*. Most species of *Uloma* have epipleura abbreviated in the area of the base of the last visible abdominal sternite; this is the condition in the species of *Uloma* from the United States and in all Old World species that I have seen.

All five species of *Uloma* previously recorded in the West Indies are from the Lesser Antilles, the most northern locality being Montserrat Island. Only one, *retusa*, is also known from the mainland. The first and second characteristics given in the previous paragraph should isolate *extraordinaria* from all other species of *Uloma* in any key known to me. However, a key to the species of the West Indies does not exist. The following key should be used with caution because it was constructed from the original descriptions of Champion's species, not from specimens.

### KEY TO THE MALES OF THE SPECIES OF *ULOMA* FROM THE WEST INDIES

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|----|--|-----------------------------|
| 1. | Pronotum evenly convex anteriorly-----   | 2                           |
|    | Pronotum with a strong depression anteriorly-----  | 5                           |
| 2. | Metatibia with a ventral tooth near base-----  | 3                           |
|    | Metatibia without a ventral tooth near base-----   | 4                           |
| 3. | Protibia with very strong excavation on dorsal border (fig. 1) <b>EXTRAORDINARIA</b> , new species |                             |
|    | Protibia with usual serrations on dorsal border-----   | <b>GRENADENSIS</b> Champion |
| 4. | Elytral intervals strongly convex-----   | <b>SULCATA</b> Champion     |
|    | Elytral intervals moderately convex-----   | <b>ANTILLARUM</b> Champion  |
| 5. | Protibia widened ventrally at basal third-----   | <b>RETUSA</b> (Fabricius)   |
|    | Protibia not widened ventrally at basal third-----   | <b>PARVULA</b> Champion     |



*Uloma extraordinaria*, new species. FIG. 1, dorsal view of protibia of holotype, male; FIG. 2, same of allotype, female; FIG. 3, dorsal view of paramere of paratype, male.